UMASS AMHERST COMPUTER SCIENCE PROFESSORS, TOWN OFFICIALS LAUNCH WIRELESS NETWORK IN DOWNTOWN AMHERST

AMHERST, Mass. – In a distinctive town-gown electronic partnership, researchers from the University of Massachusetts Amherst and town officials have unveiled the first phase of a community wireless mesh network in downtown Amherst. This network allows the public and town workers access to a broad range of services from WiFi-equipped mobile devices including laptop computers, hand-held devices and smartphones.

The new wireless network is the result of collaboration between Kristopher J. Pacunas, information technology director for the Town of Amherst, and Mark Corner and Brian Levine, professors in the UMass Amherst computer science department. The network has been in a testing phase for the last several months.

UMass researchers are using the network to run a number of projects in mobile computing, networking for disaster management, and municipal sensor networks.

The system will be managed and maintained by the town's information technology department. Equipment and installation were funded through several grants to UMass Amherst from the National Science Foundation and the Defense Advanced Research Projects Agency.

In addition to providing Internet access to the public, town officials have begun experimenting with operating some town services over the network. It has the potential to reduce costs for phone lines that the town leases for data from sewage and water sensors. It could also greatly increase the monitoring of the town's infrastructure, including traffic signals and pollution.

"This system will have a positive impact on town services by providing citizens the ability pay for parking with a credit card, or initiating traffic calming though connected traffic signals," Pacunas says. "I also believe the possibilities surrounding economic development are endless. I am very excited about where this system and this partnership with the university will take this community."

For the UMass Amherst faculty members, the new network offers other research benefits. "We believe that the greatest research results come from experimentation done in a real testbed," says Corner. He says cooperation between the town and the research laboratory he runs with Levine will accelerate their ability to gain valuable insights into mobile systems.

More information about the community wireless project, including a detailed coverage map, can be found at: http://www.amherstma.gov/communitywireless Corner and Levine's research is outlines at: http://prisms.cs.umass.edu/ and http://prisms.cs.umass.edu/dome